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**United States Patent** [19][11] **Patent Number:** **5,862,129****Bell et al.**[45] **Date of Patent:** **Jan. 19, 1999**

[54] **APPARATUS AND METHOD FOR THE  
DETECTION AND ELIMINATION OF  
CIRCULAR ROUTED SS7 GLOBAL TITLE  
TRANSLATED MESSAGES IN A  
TELECOMMUNICATIONS NETWORK**

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[57] **ABSTRACT**

A method (100, 700, 800) for detecting and eliminating circular routed messages in a telecommunications network includes the steps of receiving a message, and determining a derived destination point code for the received message (102). The derived destination point code is then compared with an originating point code in the message (108). A circular routed message is detected if the derived destination point code is the same as the originating point code. This comparison may be disabled and instead the routing information for routing the message indicated by the derived destination code may be compared with the originating point code (706). Alternatively, the network identifiers indicated by the derived destination point code and the originating point code are compared (806).

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[52] **U.S. Cl.** ..... **370/236; 370/392; 370/385;  
370/522; 379/230**

[58] **Field of Search** ..... **370/235, 236,  
370/237, 249, 392, 400, 401, 410, 420,  
385, 522, 524; 395/200.15, 200.16, 200.11;  
340/825.05; 379/230**

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**19 Claims, 3 Drawing Sheets**